



Patent  
Attorney Docket No. 029777-015

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of

Josef GIESSLER et al.

Application No.: 10/642,43

Filed: August 18, 2003

For: DRILLING OR MILLING TOOL AND  
PROCESS FOR ITS MANUFACTURE

Group Art Unit: 3722

Examiner: [ Not Assigned ]

Confirmation No.: 1920

**INFORMATION DISCLOSURE STATEMENT  
TRANSMITTAL LETTER**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Enclosed is an Information Disclosure Statement and accompanying form PTO-1449 for the above-identified patent application.

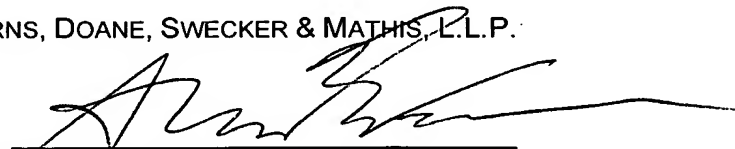
- ☒ No additional fee for submission of an IDS is required.
- ☐ The fee of \$180.00 (1806) as set forth in 37 C.F.R. § 1.17(p) is also enclosed.
- ☐ A statement under 37 C.F.R. § 1.97(e) is also enclosed.
- ☐ A statement under 37 C.F.R. § 1.97(e), and the fee of \$180.00 (1806) as set forth in 37 C.F.R. § 1.17(p) are also enclosed.
- ☐ Charge \$\_\_\_\_\_ to Deposit Account No. 02-4800 for the fee due.
- ☐ A check in the amount of \$ --- is enclosed for the fee due.

The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17 and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date: March 10, 2004

By:   
Alan E. Kopecki  
Registration No. 25,813

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Patent  
Attorney Docket No. **029777-015**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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| In re Patent Application of     | ) |                           |
|                                 | ) |                           |
| Josef GIESSLER et al.           | ) | Group Art: 3722           |
|                                 | ) |                           |
| Application No. 10/642,343      | ) | Examiner [ Not Assigned ] |
|                                 | ) |                           |
| File: August 18, 2003           | ) | Confirmation No. 1920     |
|                                 | ) |                           |
| Title: DRILLING OR MILLING TOOL | ) |                           |
| AND PROCESS FOR ITS             | ) |                           |
| MANUFACTURE                     | ) |                           |

**SECOND INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

In keeping with the duty of disclosure as set forth in 37 C.F.R. §1.56, Applicants hereby make of record those references cited in related counterparts by the European and German Patent Offices. The cited references are identified by the attached German and European Search Reports as well as an Information Disclosure Citation form (PTO-1449).

DE-43 26 595 was submitted by an Information Disclosure Statement dated January 8, 2004.

In the European Search Report, DE-196 08 185 and U.S. Patent 5,888,036 have been designated as particular importance to claim 1. However, whereas the present invention is dealing with transition from a rake angle of the front cutting edge, towards the different helix angle of the chip flutes, German Offenlegungsschrift No. 196 08 185 does not show any rake angle which might be different from the helix angle of the chip flute at all; instead, from Figs. 7 and 8 it appears that the rake angle  $\gamma$  of the front cutting edge is just the same as the helix angle of the chip flute, as is typical for helical drills. Fig. 1 of this document shows a special drill having a negative rake angle which, however, again appears to be constant and not deviating from the helix angle of the chip flutes.

DE-196 08 185 deals with a varying side rake angle, which is the rake angle of the minor cutting edge extending along the edge of the chip flutes and which is measured towards the radius, i.e., in a horizontal plane, while the rake angle of the front cutting edge is to be measured within a vertically extending plane.

Also, although Arai et al. U.S. Patent 5,888,036 defines a chip flute angle and a "second cutting angle  $\theta_2$ " and "third cutting angle  $\theta_3$ ", the definition of those angles (see Fig. 4) appears to have nothing to do with the presently claimed rake angle.

It is respectfully requested that acknowledgment of this filing be made concurrent with issue of an Official communication in the present application.

Respectfully submitted,

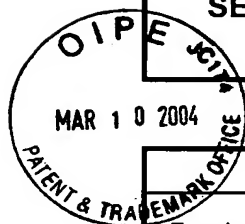
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Date: March 10, 2004

Substitute for forms 1449A/PTO &amp; 1449B/PTO

ATTORNEY'S DKT NO.  
029777-015APPLICATION NO.  
10/642,343**SECOND INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**APPLICANT  
Josef GIESSLER et al.FILING DATE  
August 18, 2003GROUP  
3722**U.S. PATENT DOCUMENTS**

| Examiner<br>Initials | Document<br>Number | Kind Code<br>(if known) | Name of Patentee or Applicant<br>of Cited Document | Issue/Publication<br>Date<br>(MM-DD-YYYY) |
|----------------------|--------------------|-------------------------|--|---|
|                      | 5 888 036          |                         | ARAI et al.  | 03/30/1999                                |
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**FOREIGN PATENT DOCUMENTS**

| Examiner<br>Initials | Document<br>Number | Kind Code<br>(if known) | Country | Date of Publication<br>(MM-DD-YYYY) | Translation<br>Yes No |  |
|----------------------|--------------------|-------------------------|---------|-------------------------------------|-----------------------|--|
|                      | 196 08 185         |                         | GERMANY | 09/11/1997                          |                       |  |
|                      | GM78 35 107        |                         | GERMANY | 05/03/1979                          |                       |  |
|                      | 636 586            |                         | GERMANY | 10/15/1933                          |                       |  |
|                      | WO 02/20216        |                         | PCT/AU  | 03/14/2002                          |                       |  |
|                      | WO96.35537         |                         | PCT/US  | 11/14/1996                          |                       |  |
|                      |                    |                         |         |                                     |                       |  |
|                      |                    |                         |         |                                     |                       |  |
|                      |                    |                         |         |                                     |                       |  |

**NON PATENT LITERATURE DOCUMENTS**

| Examiner<br>Initials | Include name of author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. |
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| Examiner<br>Signature |  | Date<br>Considered |  |
|-----------------------|--|--------------------|--|

EXAMINER: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. **SEND TO:** Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.